

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
WITH PACKET SWITCHING NETWORK

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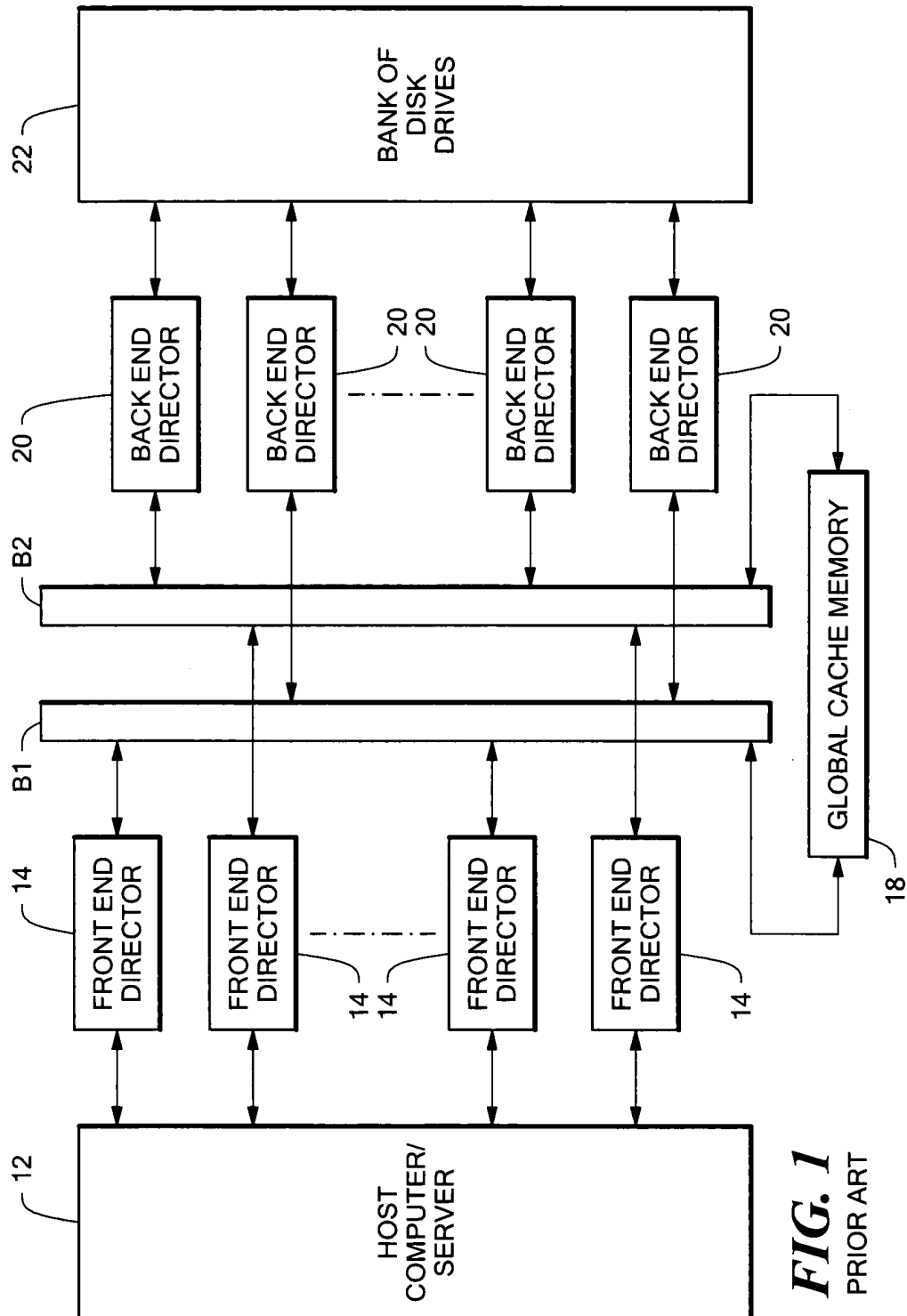


FIG. 1
PRIOR ART

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SYSTEM INTERFACE 160

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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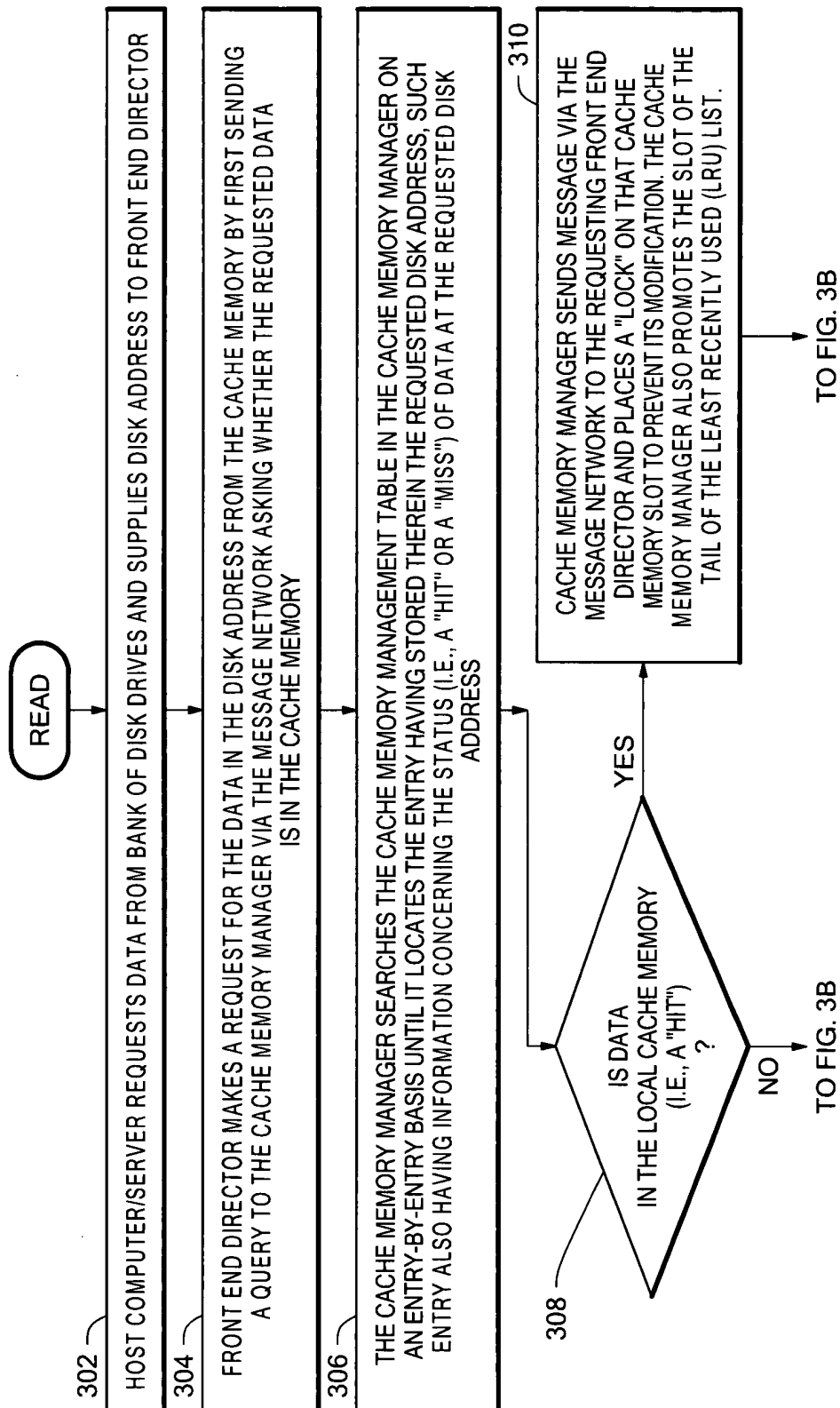
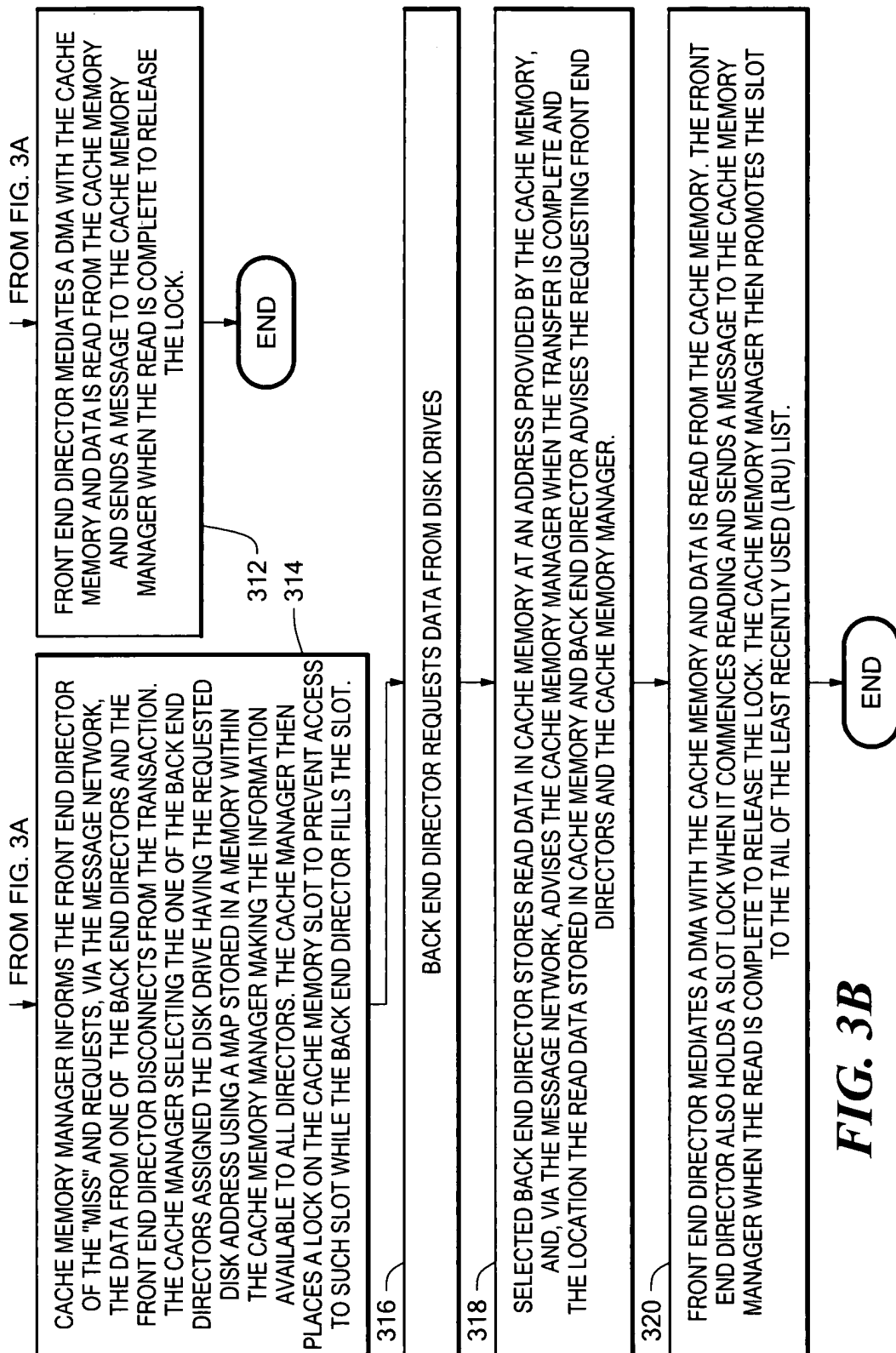


FIG. 3A

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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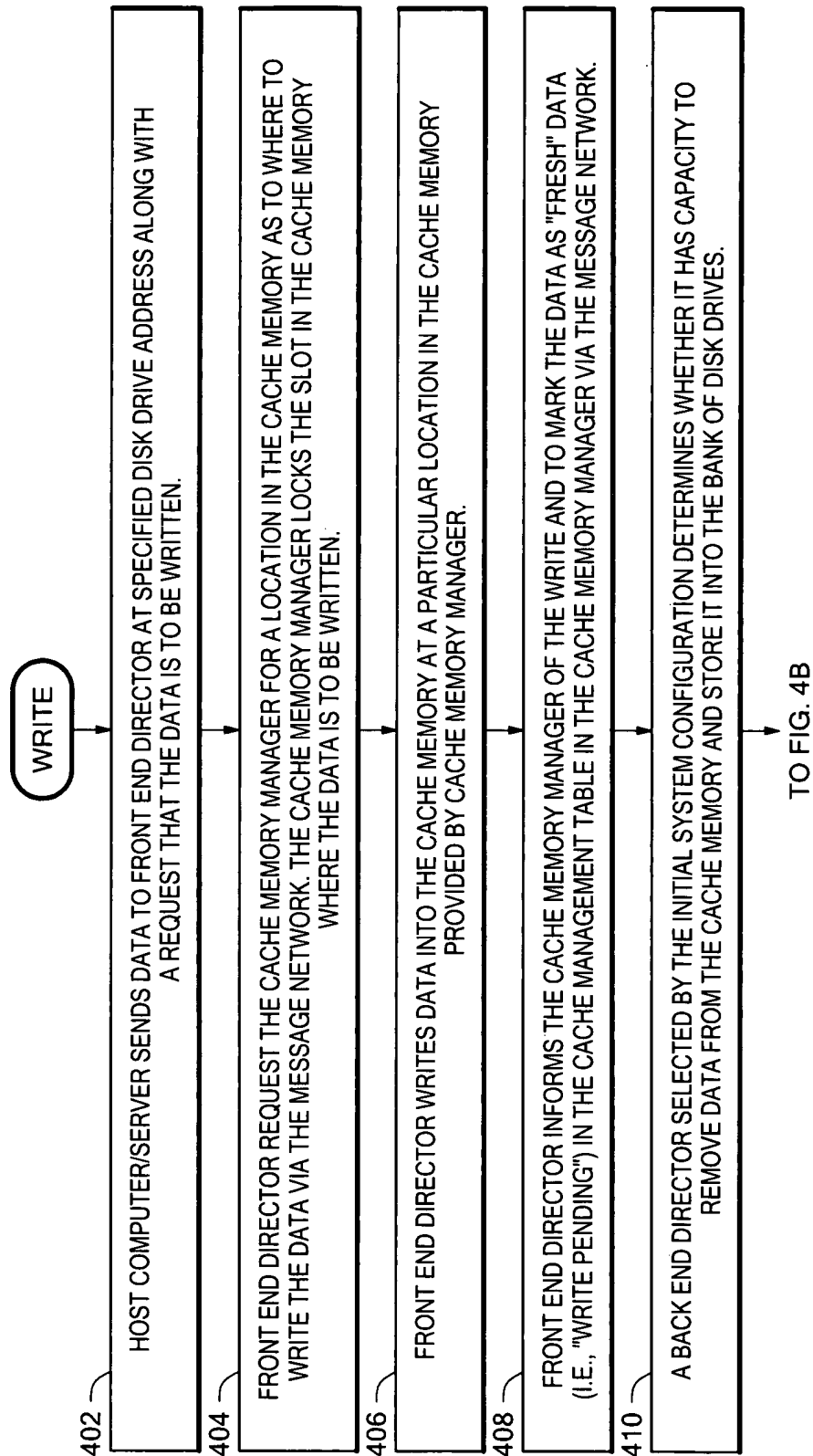


FIG. 4A

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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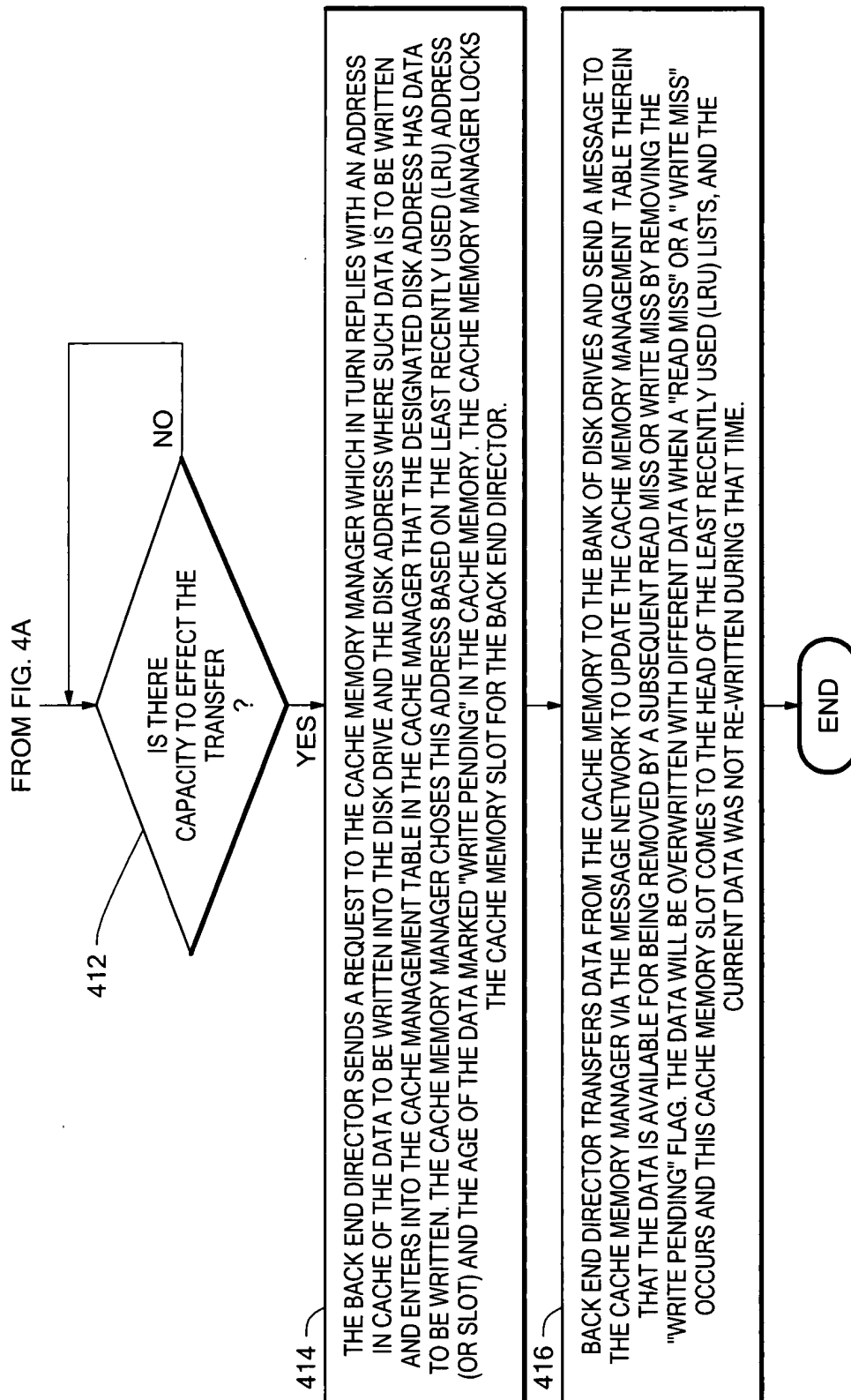


FIG. 4B

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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ADDRESS TO MAP	INFORMATION STORED IN MAP AT THE MAP ADDRESS		
	DISK ADDRESS/HIT or 'MISS'		MISC. CONTROL
CACHE MEMORY SLOT			TIME WRITTEN
Cache Memory Slot 1	IN DISK DRIVE AT ADDRESS D (A 'MISS')		
Cache Memory Slot 2	IN DISK DRIVE AT ADDRESS D (A 'MISS')		
Cache Memory Slot 3	IN DISK DRIVE AT ADDRESS D (A 'MISS')		
...
Cache Memory Slot n	IN DISK DRIVE AT ADDRESS D (A 'MISS')		

FIG. 5

HASHED ADDRESS TO MAP	INFORMATION STORED IN MAP AT THE MAP ADDRESS	HASHED ADDRESS TO MAP	INFORMATION STORED IN MAP AT THE MAP ADDRESS	HASHED ADDRESS TO MAP	INFORMATION STORED IN MAP AT THE MAP ADDRESS
CACHE MEMORY SLOT	CACHE MEMORY SLOT	CACHE MEMORY SLOT	CACHE MEMORY SLOT	CACHE MEMORY SLOT	CACHE MEMORY SLOT
Cache Memory Slot 1	Cache Memory Slot 1	Cache Memory Slot 1	Cache Memory Slot 1	Cache Memory Slot 1	Cache Memory Slot 1
Cache Memory Slot 2	Cache Memory Slot 2	Cache Memory Slot 2	Cache Memory Slot 2	Cache Memory Slot 2	Cache Memory Slot 2
Cache Memory Slot 3	Cache Memory Slot 3	Cache Memory Slot 3	Cache Memory Slot 3	Cache Memory Slot 3	Cache Memory Slot 3
...
Cache Memory Slot n ₁	Cache Memory Slot n ₁	Cache Memory Slot n ₂	Cache Memory Slot n ₂	Cache Memory Slot n ₃	Cache Memory Slot n ₃

FIG. 5A

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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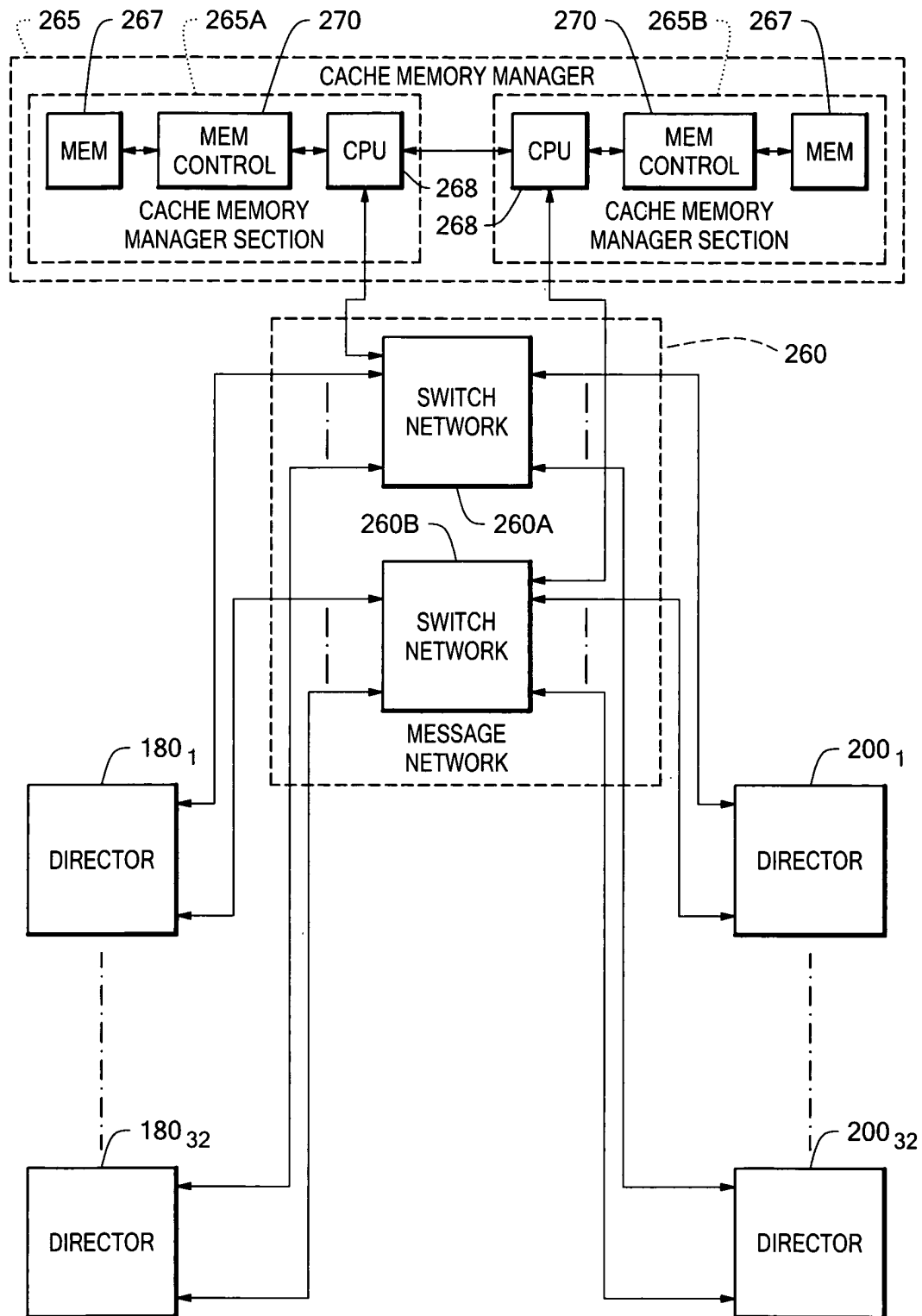


FIG. 6

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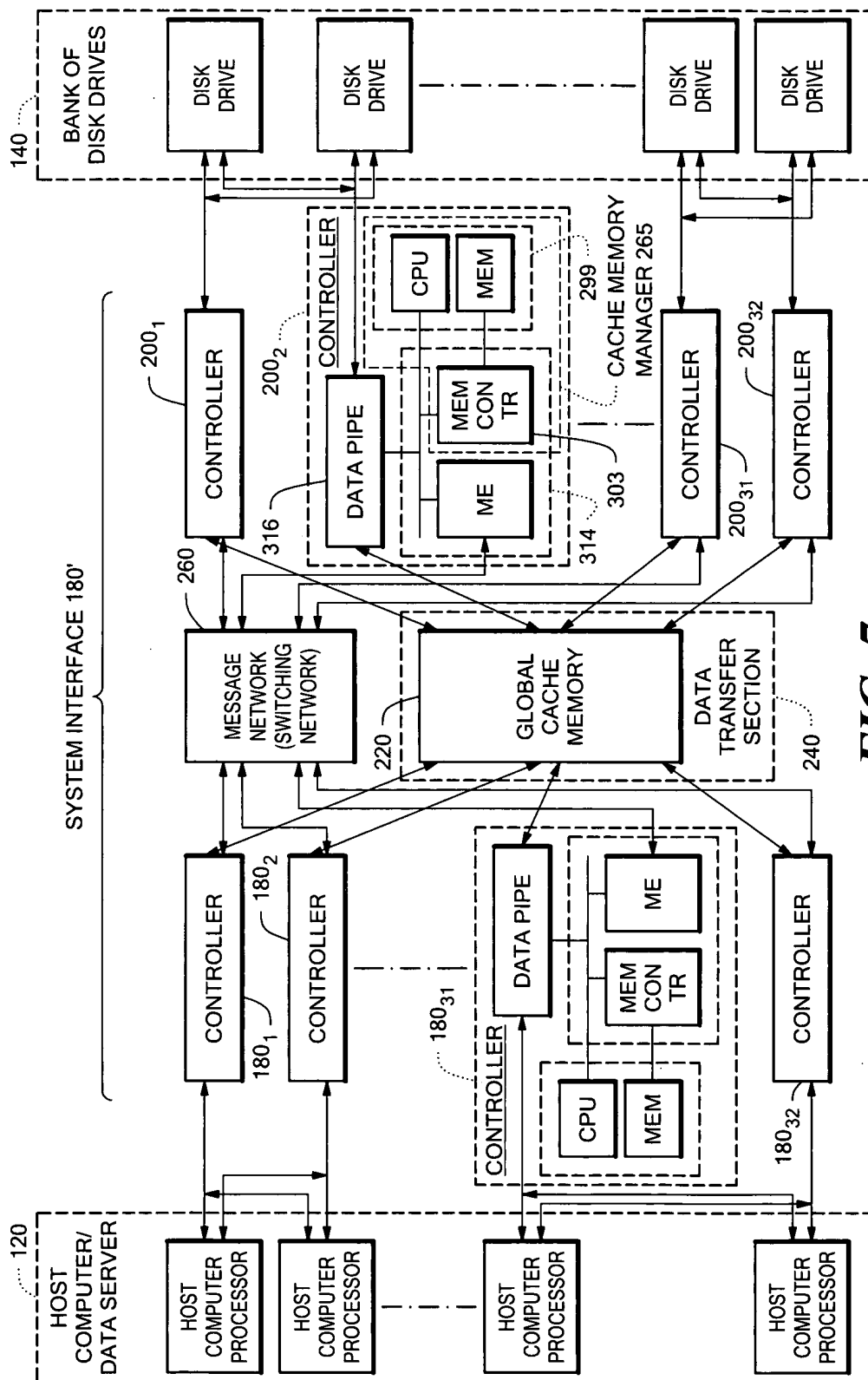


FIG. 7

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER WITH PACKET SWITCHING NETWORK

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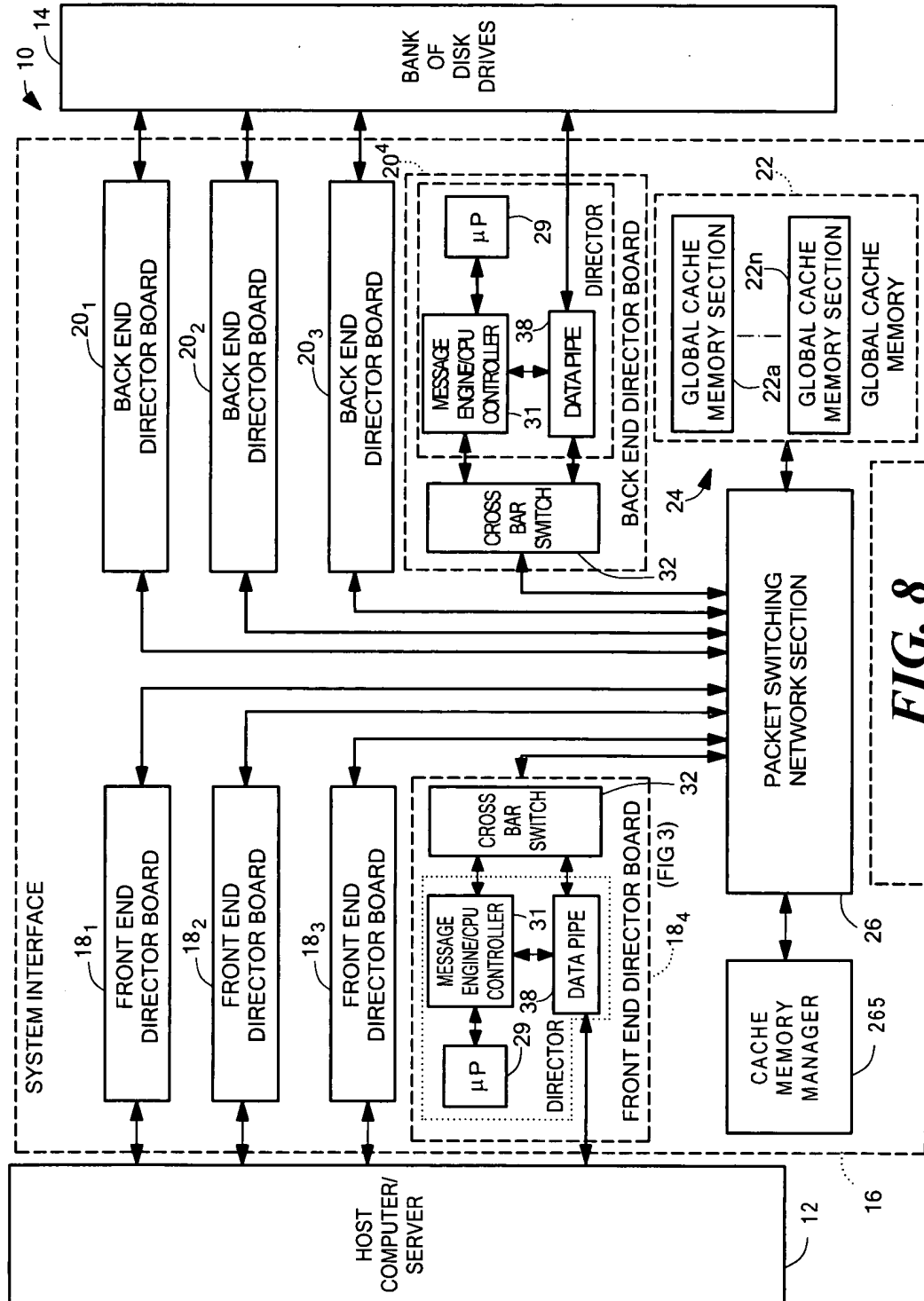


FIG. 8

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER WITH PACKET SWITCHING NETWORK

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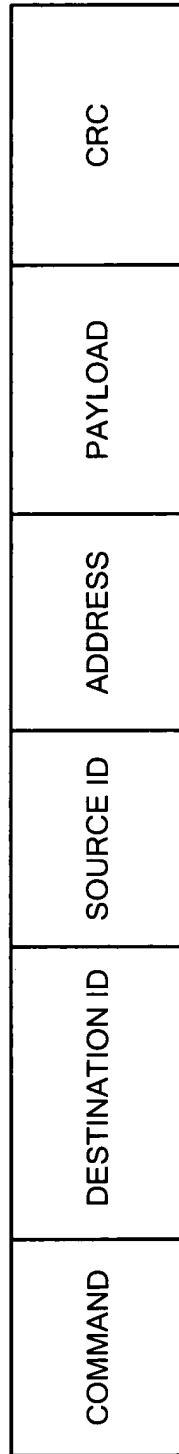


FIG. 8A

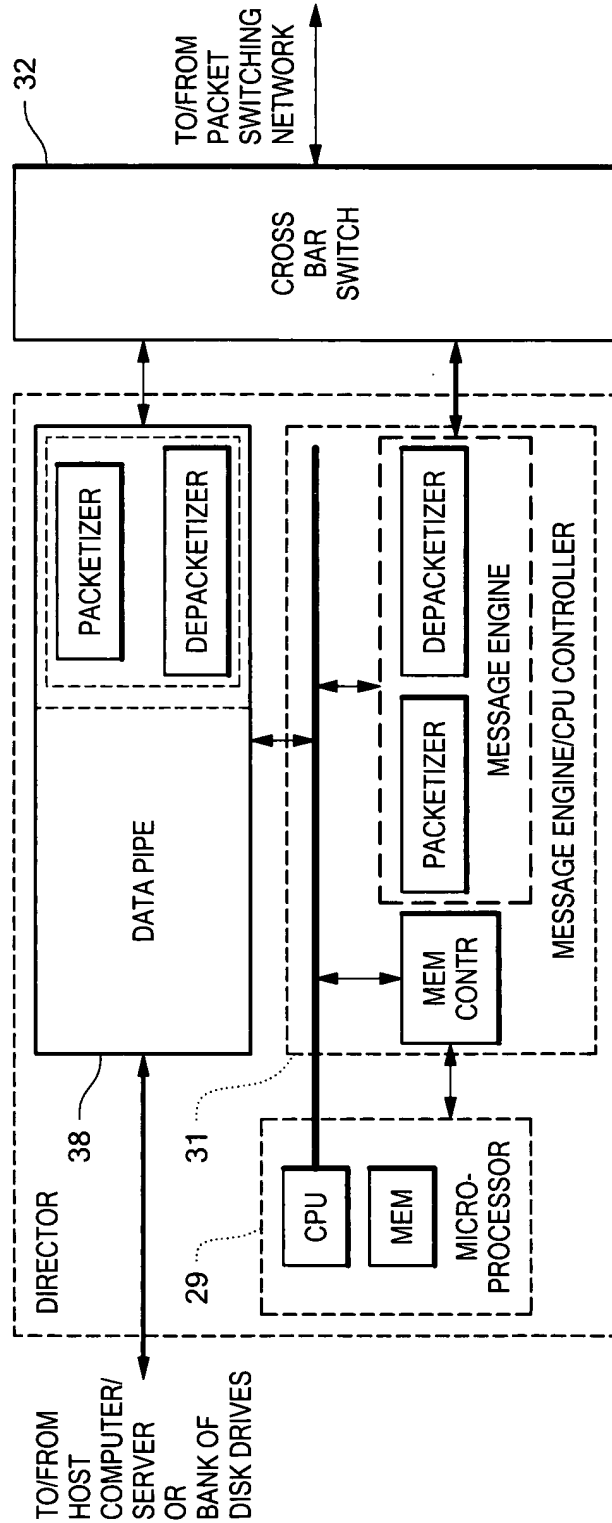


FIG. 9

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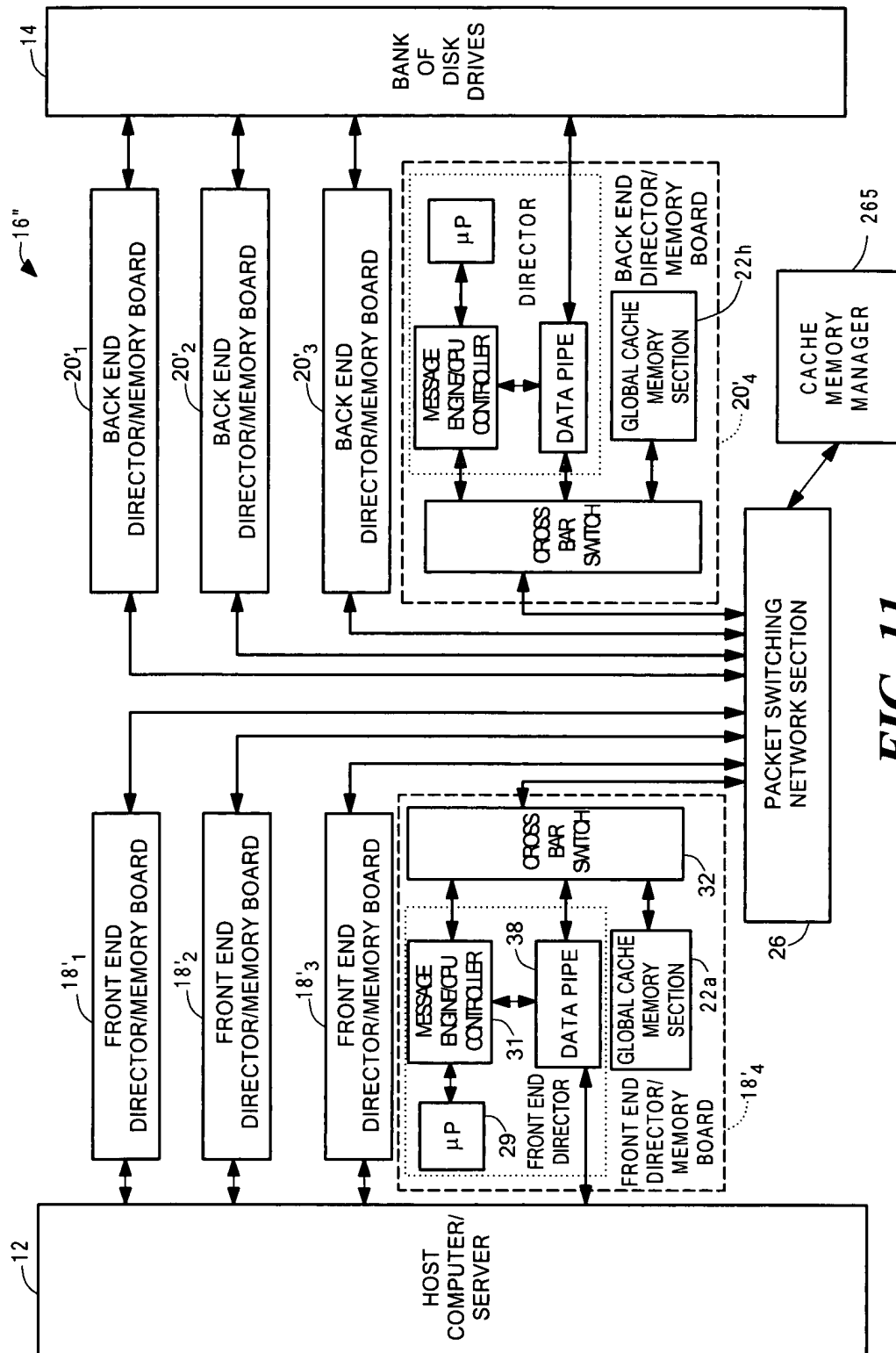


FIG. 11

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
WITH PACKET SWITCHING NETWORK

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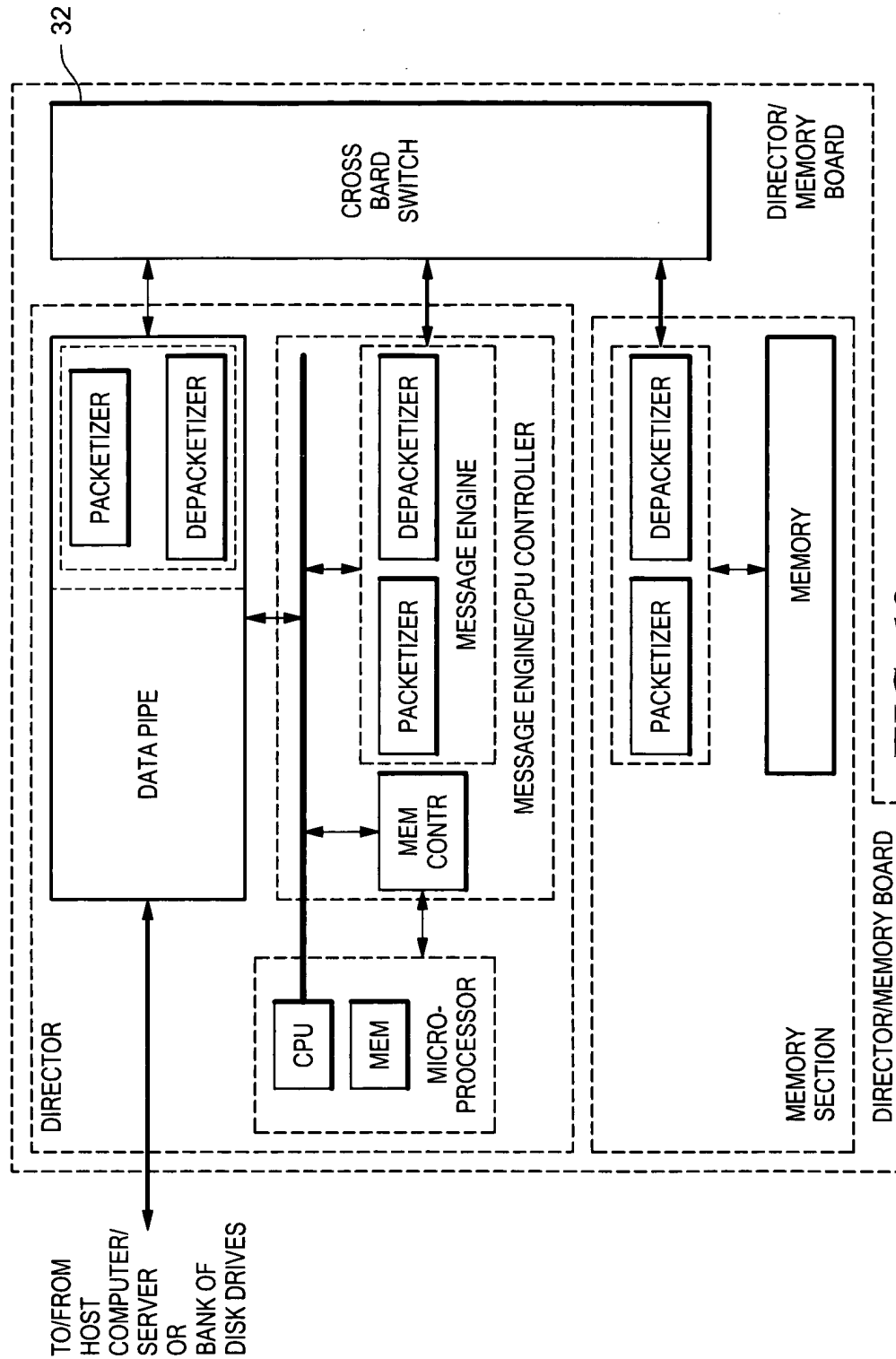


FIG. 12

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER WITH PACKET SWITCHING NETWORK

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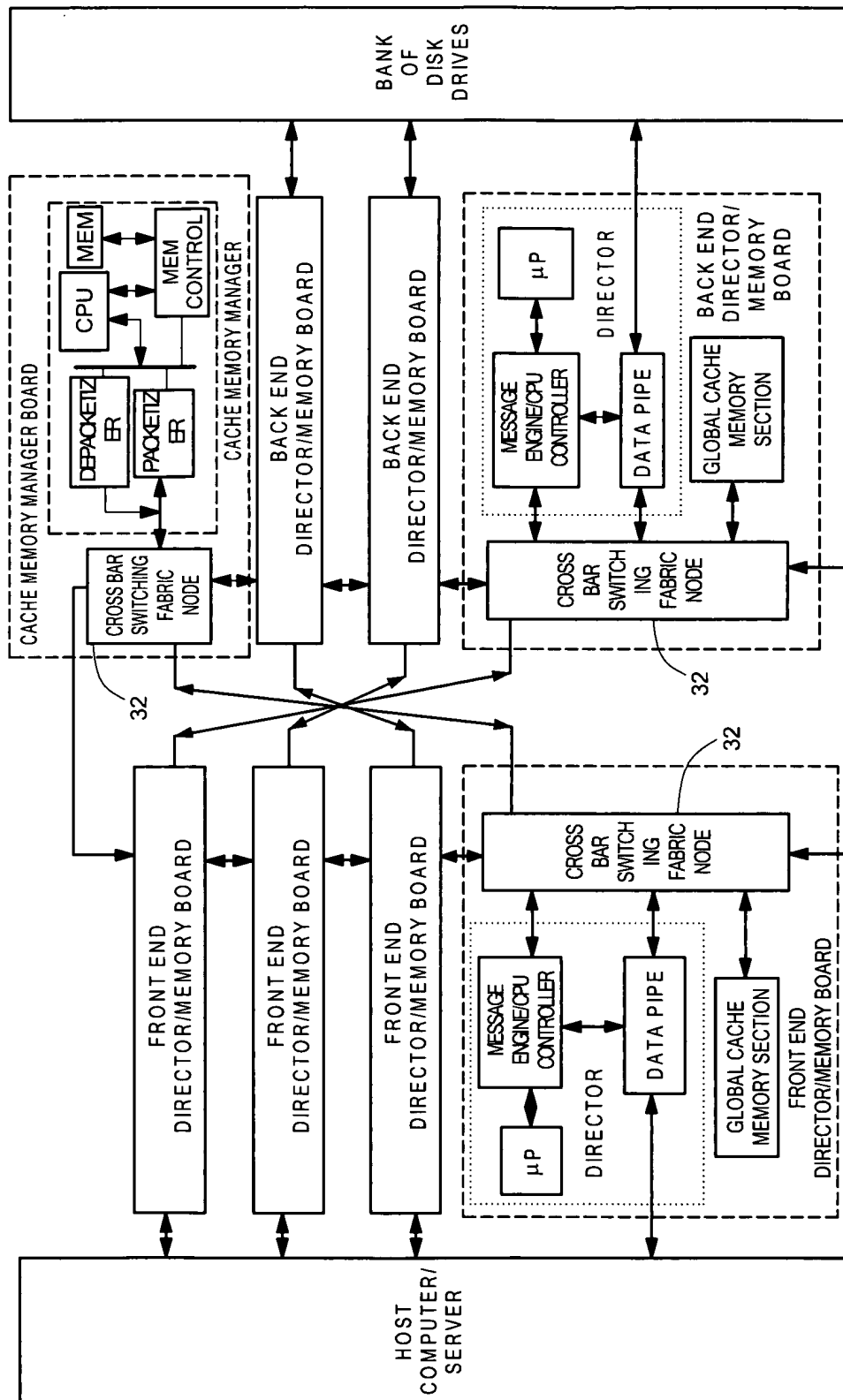


FIG. 13

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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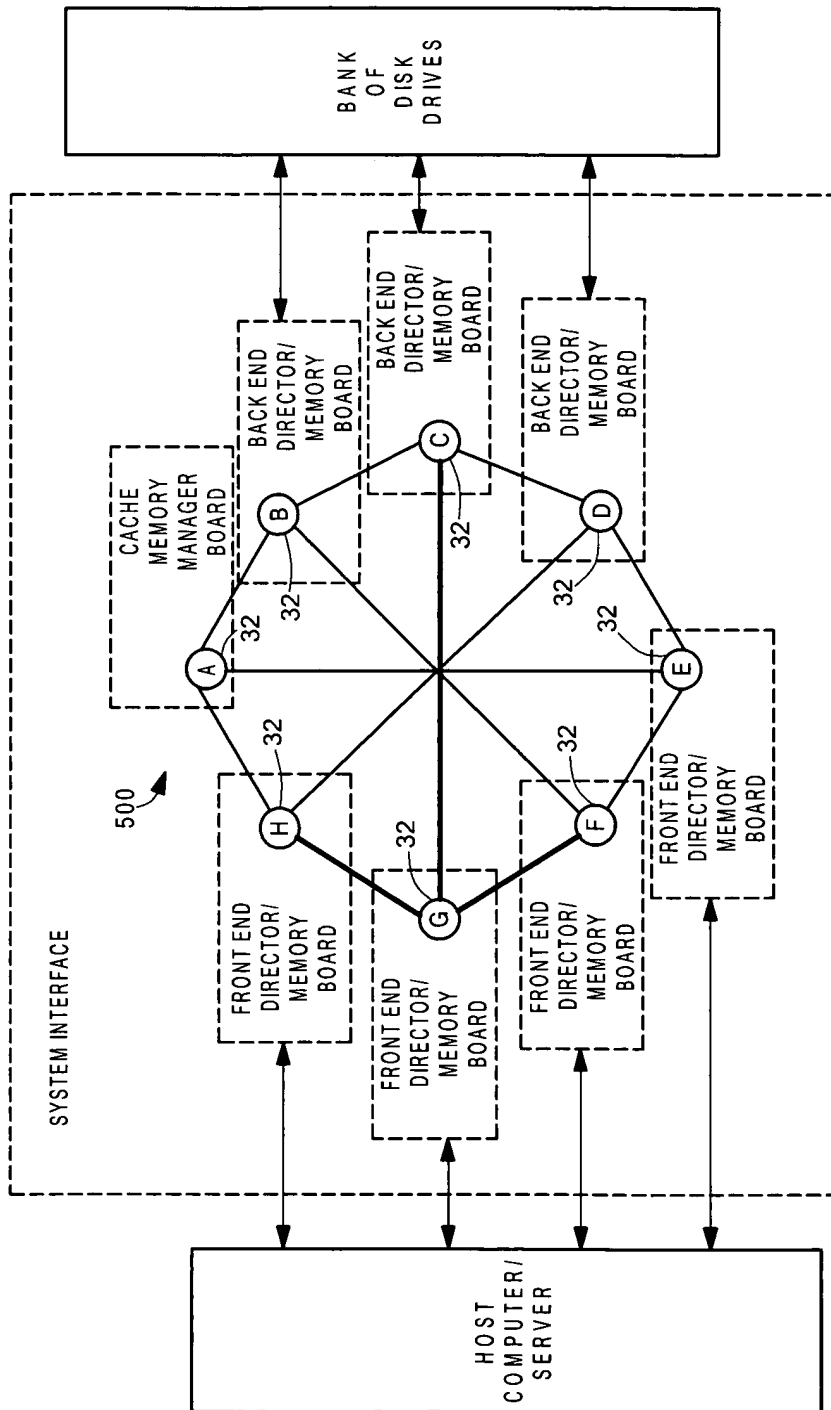


FIG. 14

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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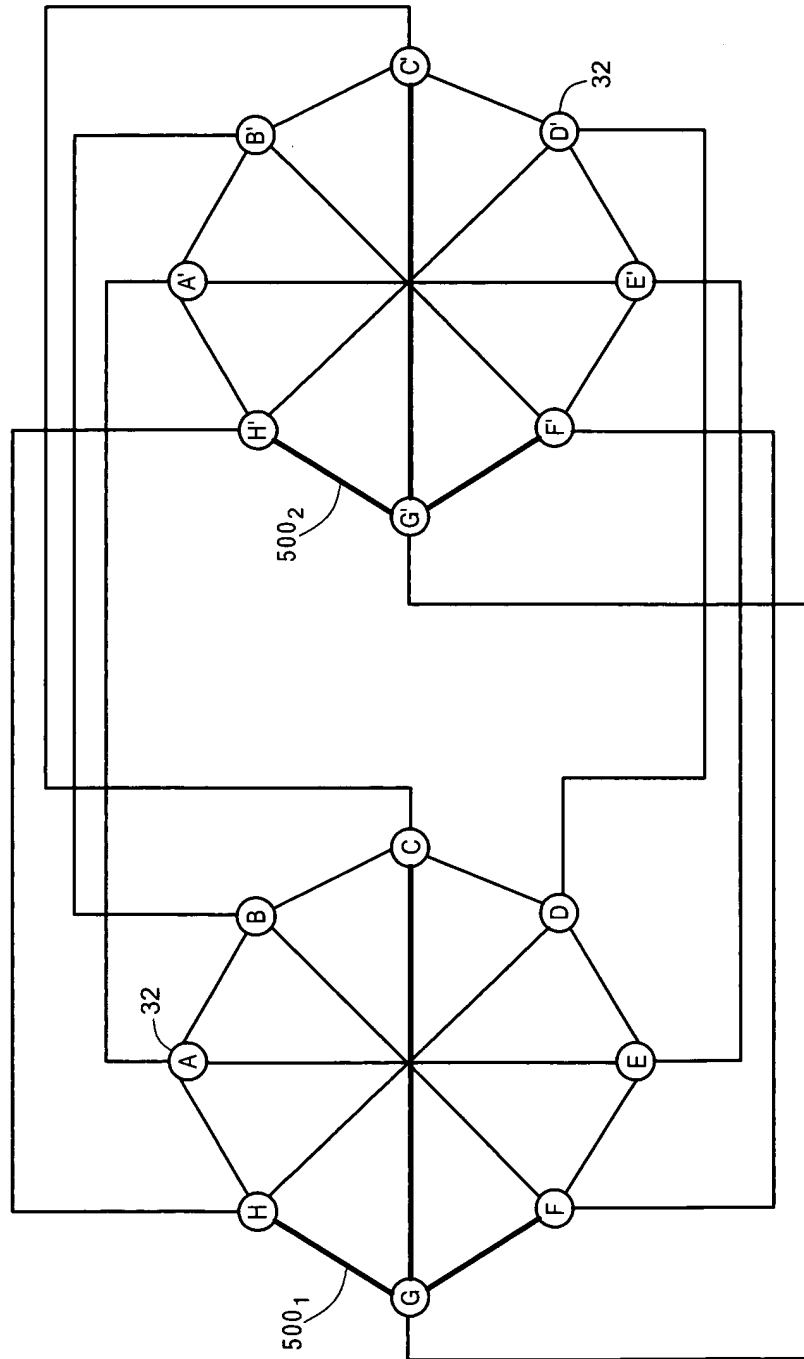


FIG. 15A

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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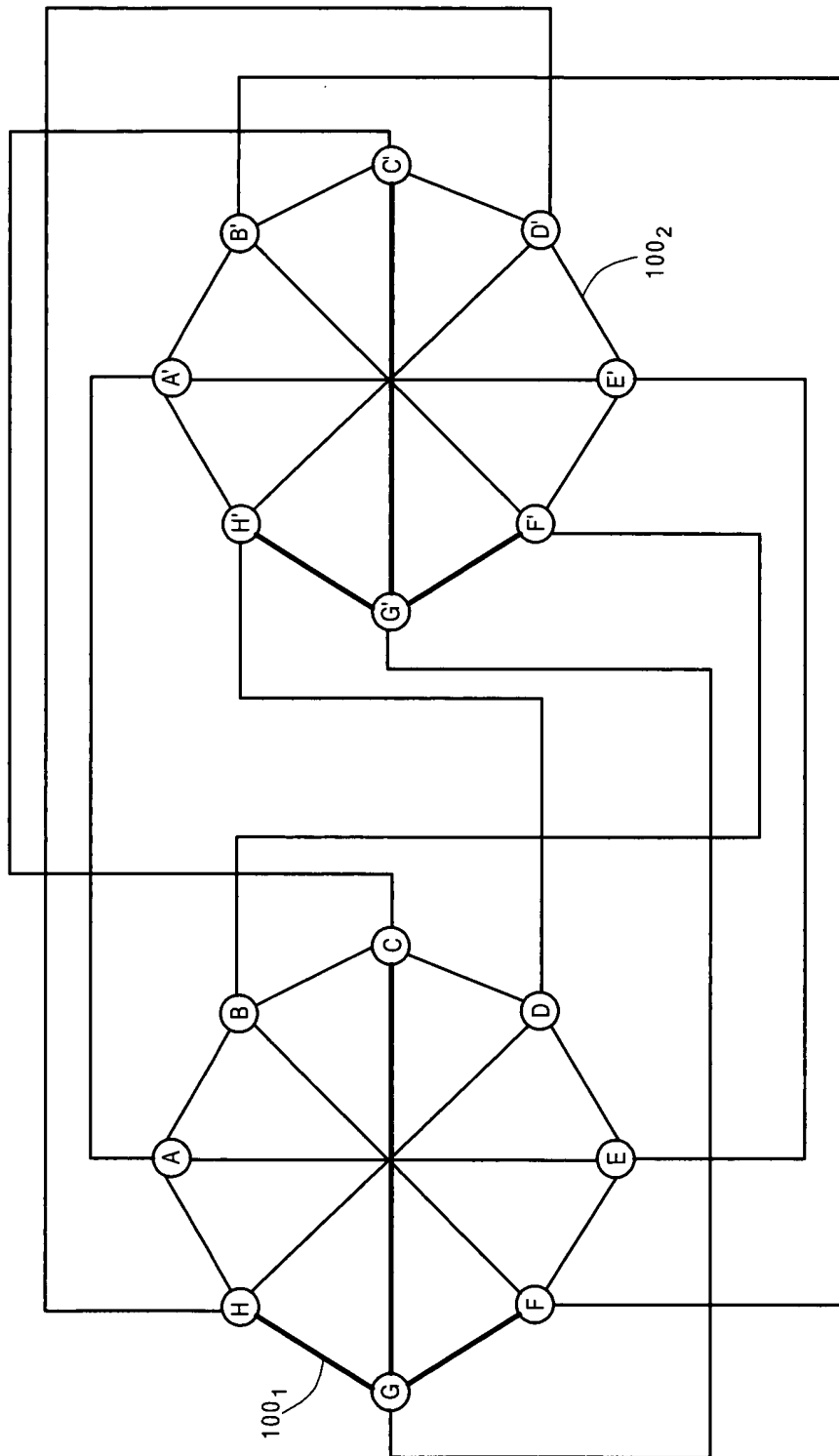


FIG. 15B

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER WITH PACKET SWITCHING NETWORK

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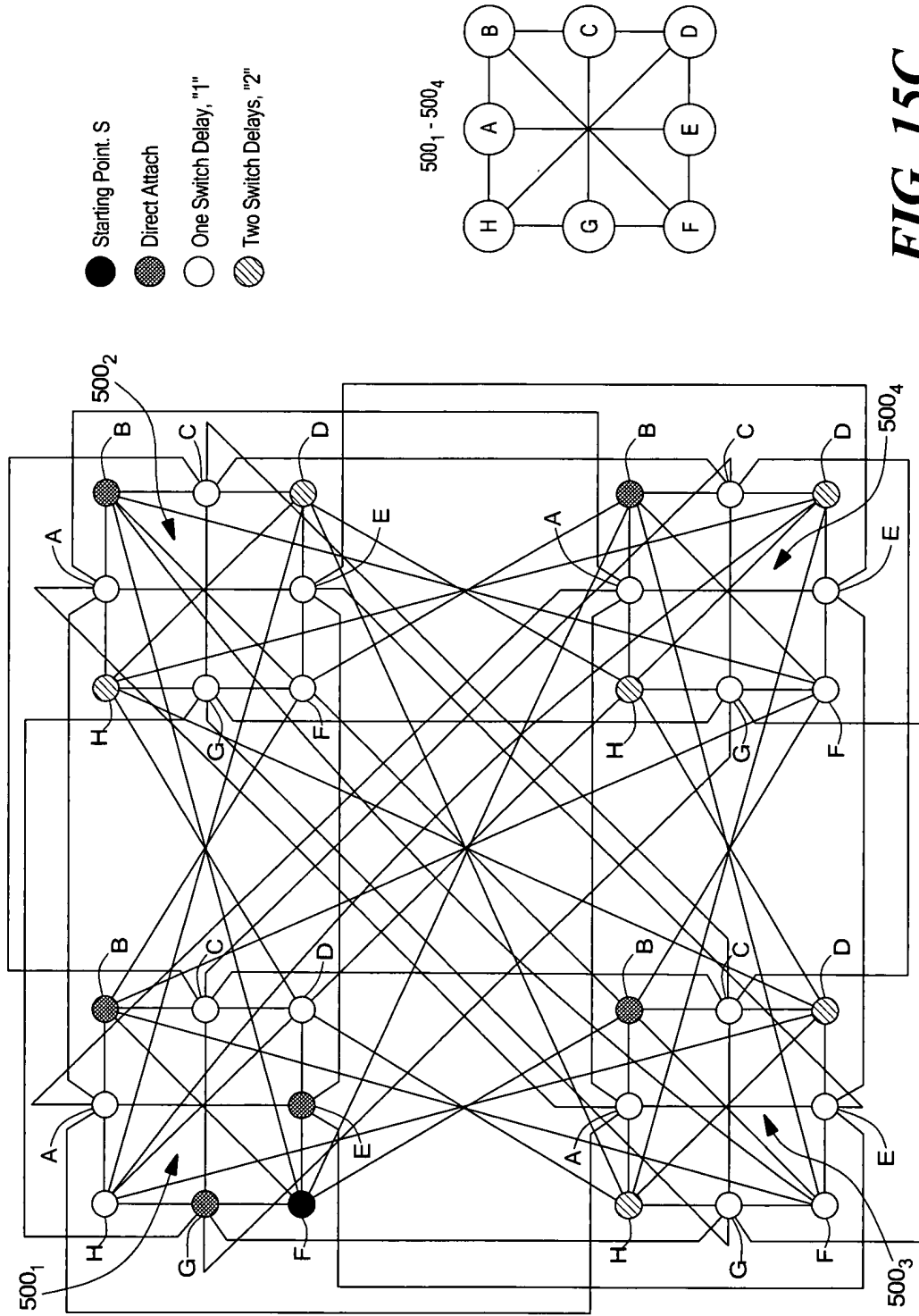


FIG. 15C

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER WITH PACKET SWITCHING NETWORK

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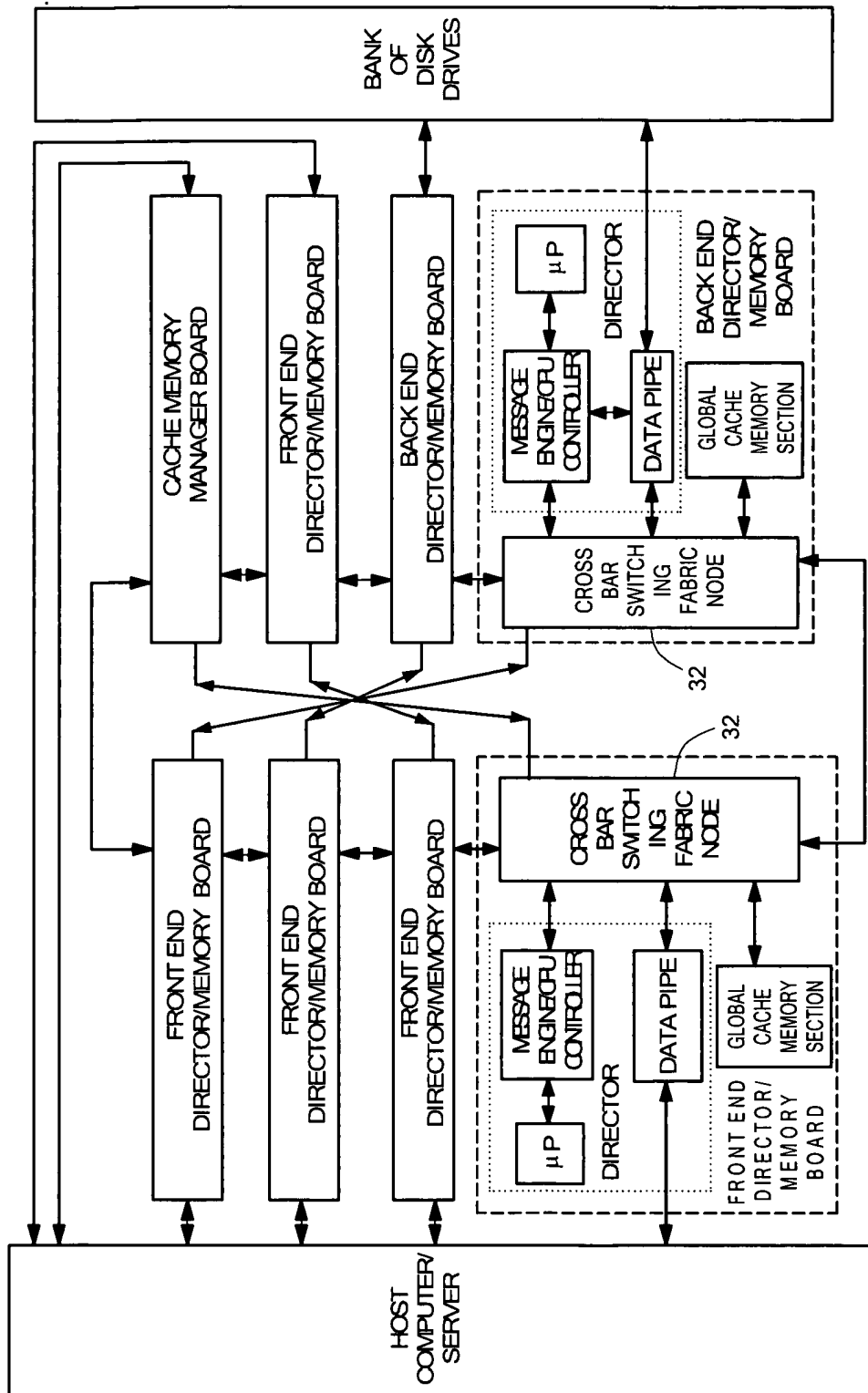


FIG. 16

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER WITH PACKET SWITCHING NETWORK

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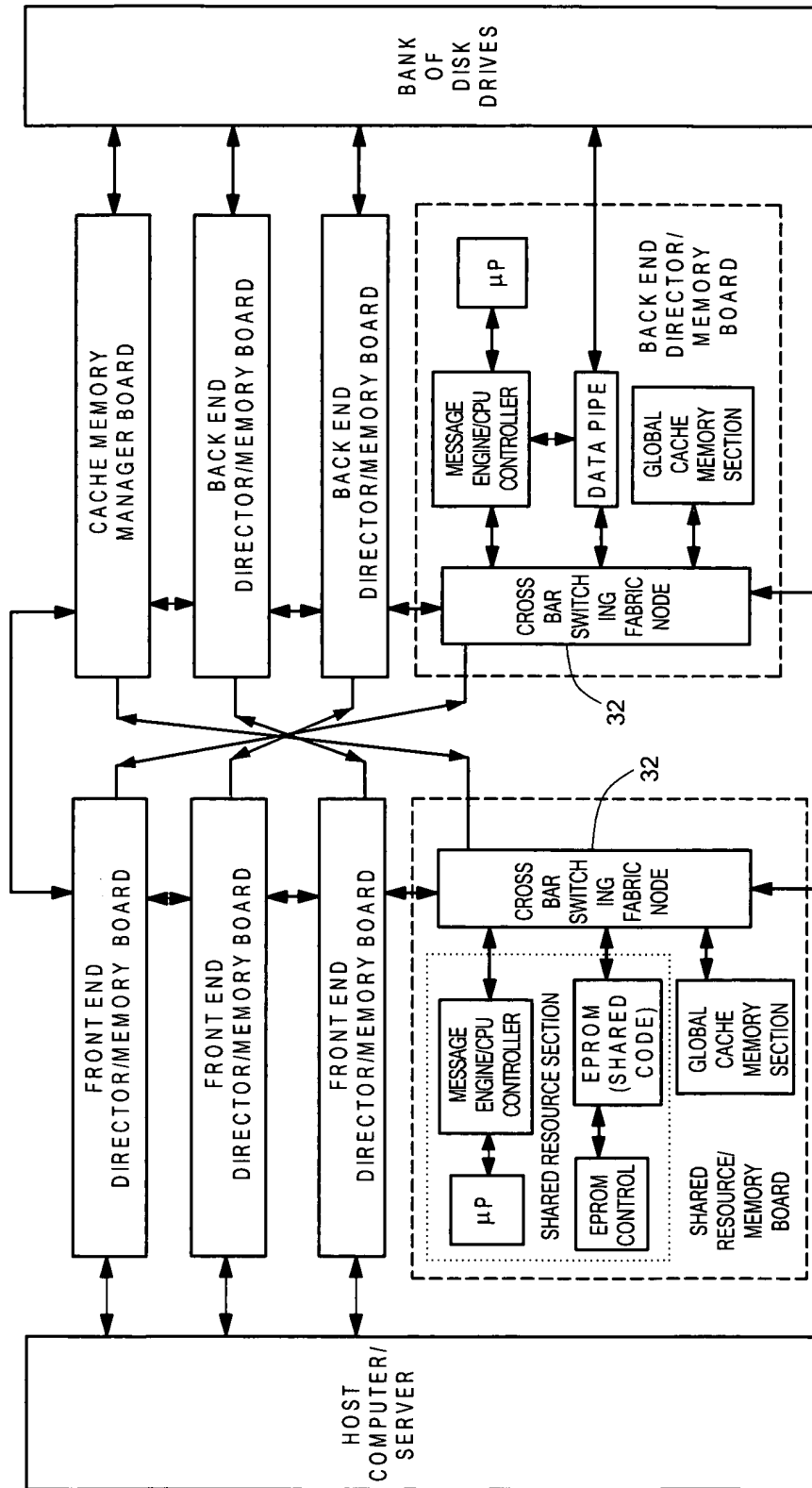


FIG. 17

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TO/FROM
PACKET
SWITCHING
NETWORK



FIG. 19

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER WITH PACKET SWITCHING NETWORK

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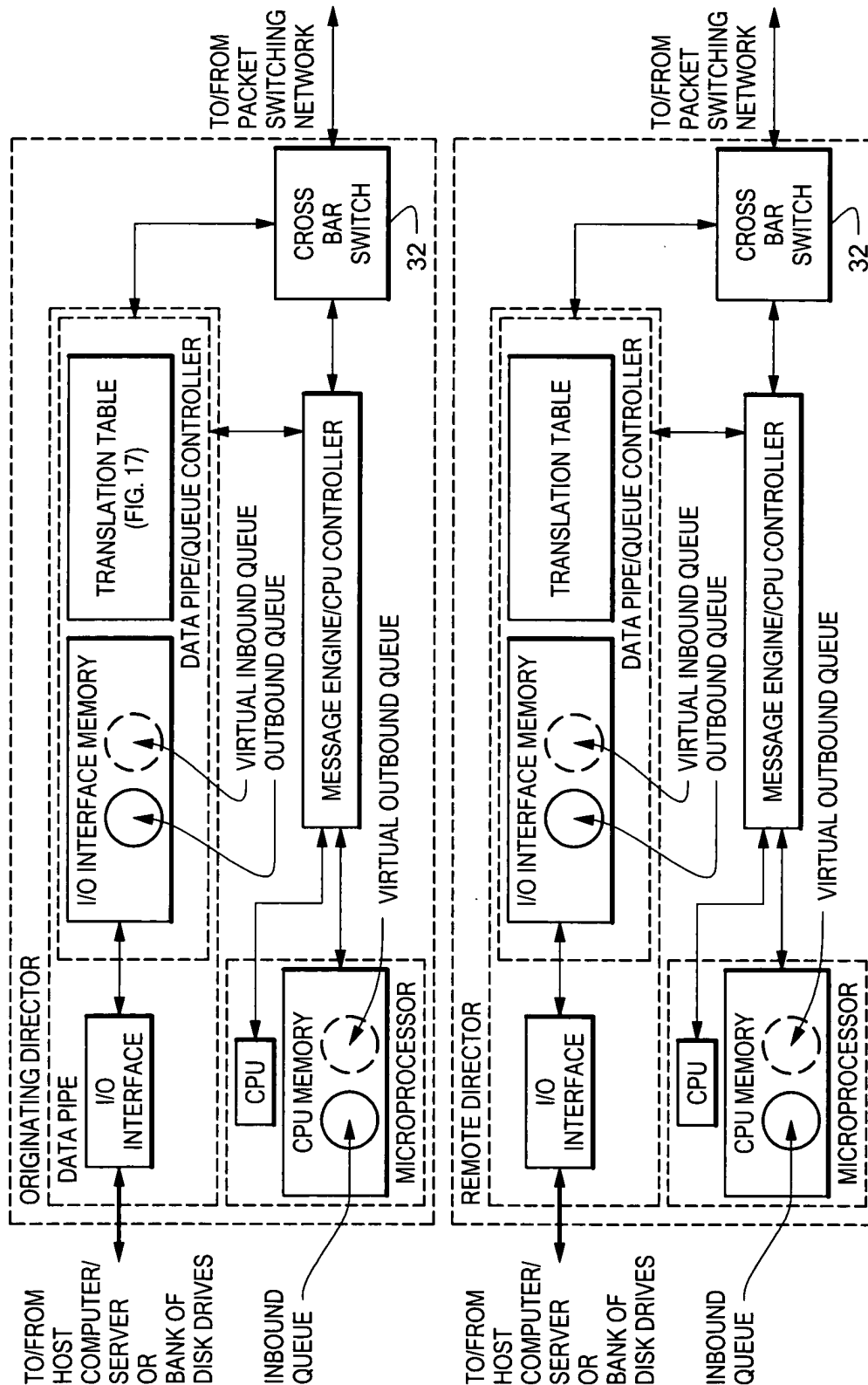


FIG. 20

DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER
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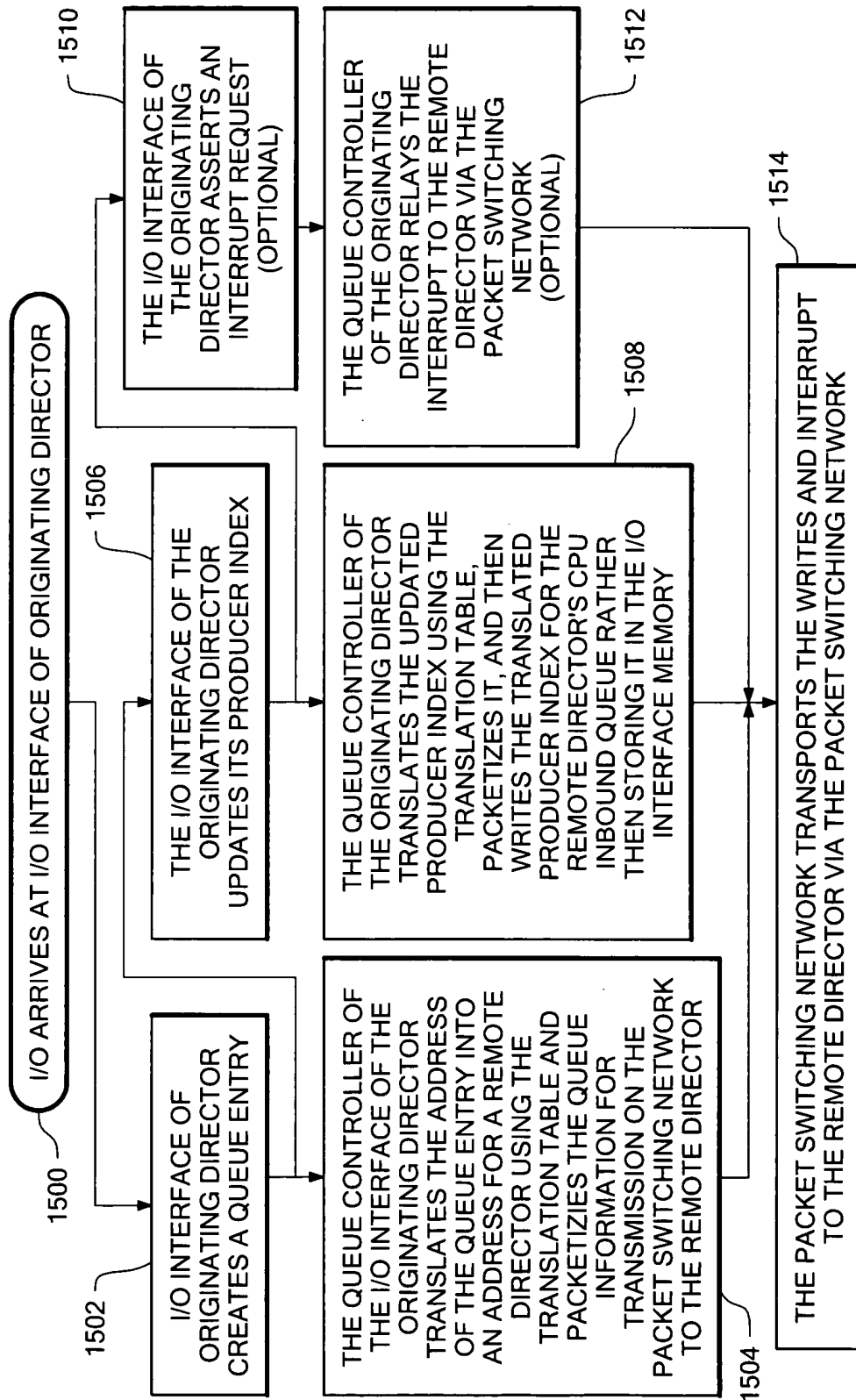


FIG. 21A

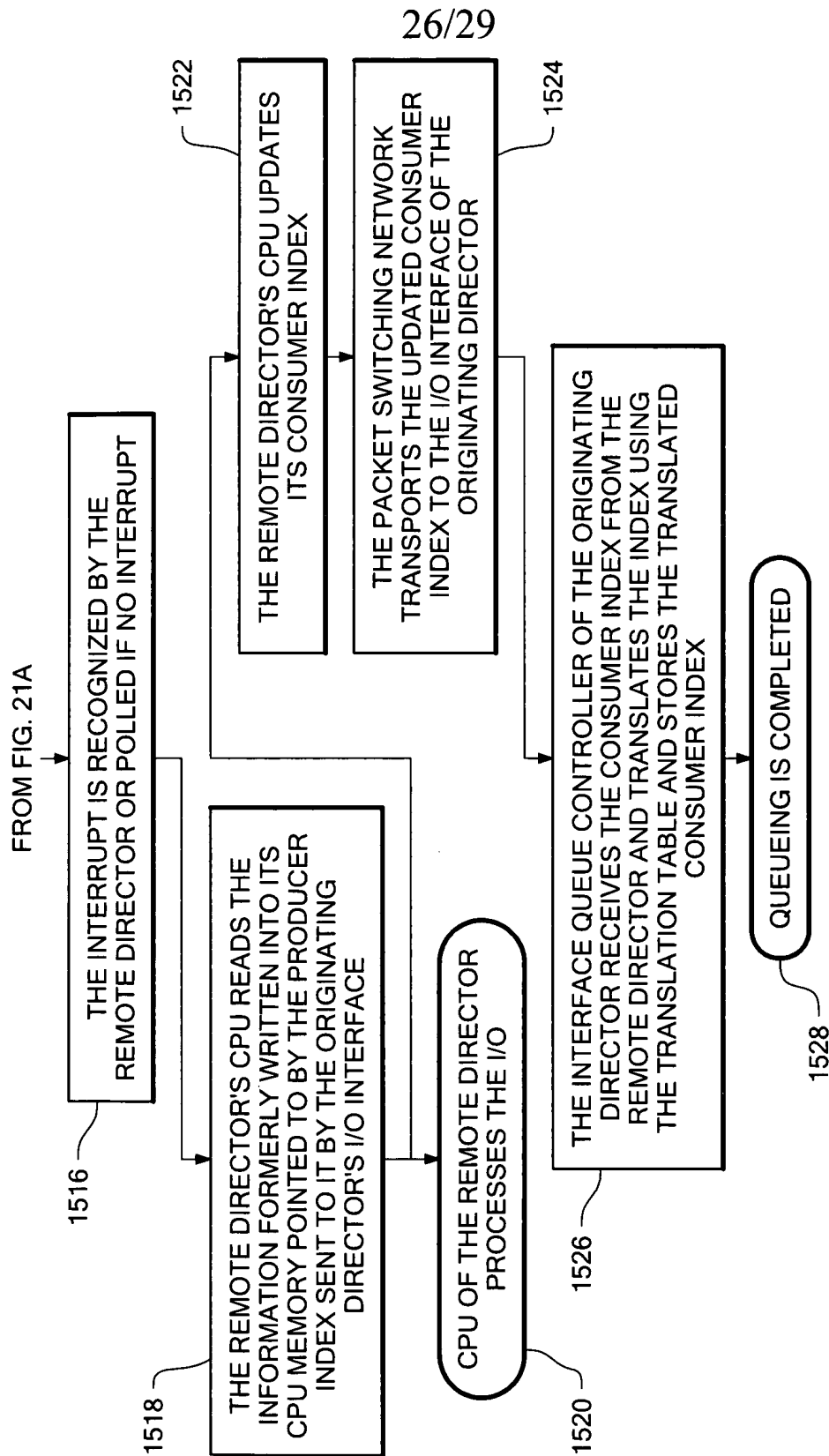


FIG. 21B

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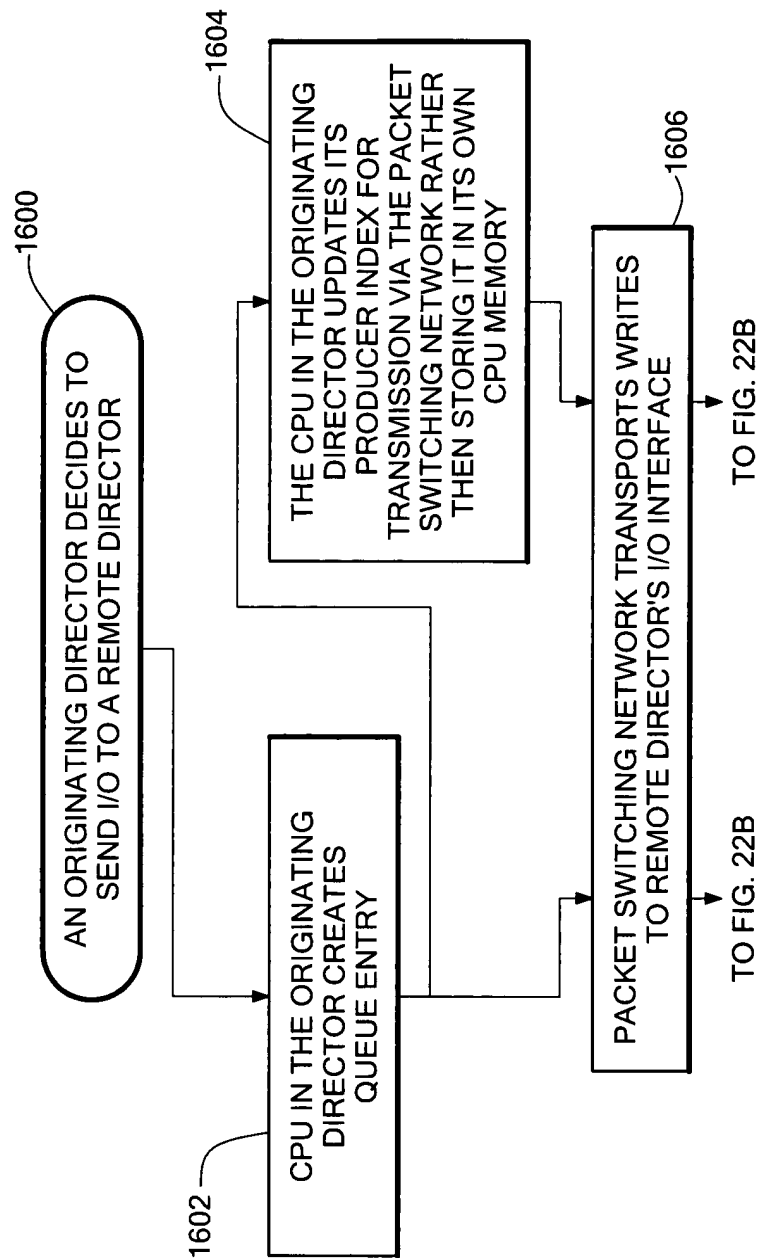


FIG. 22A

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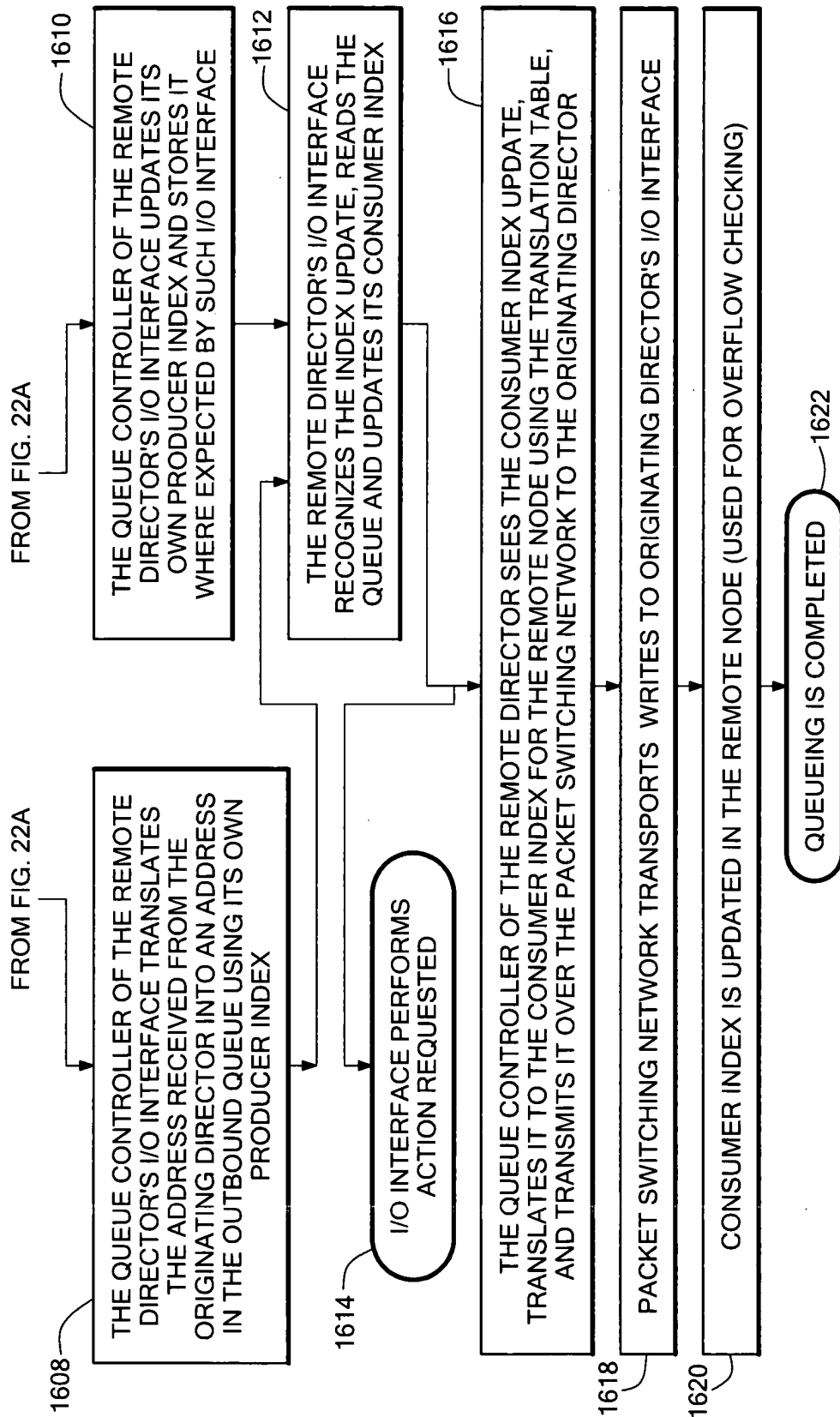


FIG. 22B

Translation Table Format

Address		Data	
f(x)	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Remote CPU Number	Remote Producer Index	Remote Consumer Index
	Misc. Remote Info		
	Misc. Remote Info		
	Misc. Remote Info		
	Misc. Remote Info		
	Misc. Remote Info		
	Misc. Remote Info		
	Misc. Remote Info		
	Misc. Remote Info		
	Misc. Remote Info		

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FIG. 23